Planning and Building Department
City Council Staff Report
Meeting Date: August 16, 2010

Topic: Tradition Plat 3 PUD Amendment
Date: August 3, 2010
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Discussion:

During the public hearing for the PUD Amendment to Tradition Plat 3, the City Council raised the following three concerns:

- Existing drainage issues in the area.
- Location of the floodplain.
- Stability of the slopes within the development.

Staff was directed by the City Council to prepare a report to address these three items prior to the second reading of the PUD Amendment Ordinance.

Drainage Issues

As the City Council may recall, the City park land west of the Tradition Plat 3 area was improved by the previous developer, Regency, based on construction plans reviewed and approved by the City. The construction plans were extremely detailed and the improvements to the drainageway were extensive and included areas of detention, restored/reconstructed wetlands, and significant bank stabilization. The purpose for the improvements to the park land was to improve the drainage in the area and stabilize the banks to make the area suitable for park land and trail development. To date staff is aware of one drainage issue which involved minor erosion at an outlet structure in the City park land west of Tradition Plat 3. Upon review, it was determined that the outlet structure was sited too high on the bank above the creek, therefore causing the erosion. This spring/summer, the storm sewer was extended and lowered so that the outlet structure could be placed closer to the creek level. The erosion has ceased and to date, no other drainage issues have been identified in or around Tradition Plat 3.

Floodplain

The floodplain of the Saylor Creek Tributary in this location is located entirely within the City park land to the west of Tradition Plat 3. Generally speaking, allowing the rear yard setback to be reduced from 30 feet to 10 feet will allow many of these residential units to be located up to 20 feet closer to the floodplain boundary. However, all of the lots within Tradition Plat 3 which abut the City park land were required to provide minimum protection elevations (MPEs). MPEs dictate the lowest opening (windows, doorways, etc.) elevation of a structure to protect them from potential flooding. As is typically required by the City of Ankeny, all of the MPEs established in Tradition Plat 3 are at least two foot above the base flood elevation. Additionally, while the MPEs are a safeguard set at two foot above the base flood elevation, the actual elevation of each lot is considerably higher than the established MPEs. As an example, the MPE established for Lot 22 is 881 feet, however the elevation of the "building pad" for the lot is approximately 895 and the elevation contour at the rear lot line (lowest part of the lot) is 886 – five feet above the MPE elevation and seven feet above the base flood elevation. Therefore, due to the elevation of the lots and the safeguards of the established MPEs, staff believes there is little concern of flooding of these lots. Furthermore, reduction of the rear yard setback will have little, if any, impact on the probable flooding of the units on these lots.

Slope Stability

Generally speaking, the lots in Tradition Plat 3 have been graded with a slope of approximately 15 to 1 or 6 ½ %. This is a modest slope that is well within the acceptable standards for building construction. The new developer does not anticipate doing any additional grading work to locate their building on the lots, outside of basement excavation and final grading. The lots, as graded, will accommodate the new building footprints.

Additionally, as mentioned previously, Regency performed a significant amount of improvement in the City park land prior to its acceptance by the City. These improvements included considerable bank stabilization along the existing drainageway with nearly 2,100 tons of rip-rap. Staff is confident that there is no issue with slope stability for the Tradition Plat 3 lots.